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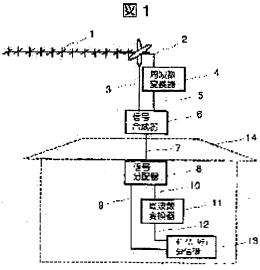
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KANBARA KOHEI

(54) BROADCAST RECEIVING FACILITY AND DIVERSITY RECEIVING SYSTEM (57) Abstract:

PROBLEM TO BE SOLVED: To provide a technology which enables broadcasting reception with a diversity technology by using an existing broadcast receiving facility without installing additional signal cables. SOLUTION: A broadcast receiving facility is equipped with more than two antennas that receive a broadcast wave of the same frequency band, a first conversion means that converts, at least, one of frequency bands for feed signals fed through the antenna into the frequency band which is different from the received frequency band, a mixing means that mixes the feed signals, the frequencies of which are converted, and the feed signals from the antenna, the frequencies of which are not converted, and a feed line that transfers the feed signals



output from the mixing means to an image receiving site. The broadcast receiving facility is also equipped with a distributing means that distributes the feed signals transferred with the feed line to the feed signals of which frequencies are converted and to the feed signals of which frequencies are not converted, and a second conversion means that converts the feed

signals being distributed, the frequencies of which are converted, to the feed signal, the frequency band of which is the receiving frequency band.

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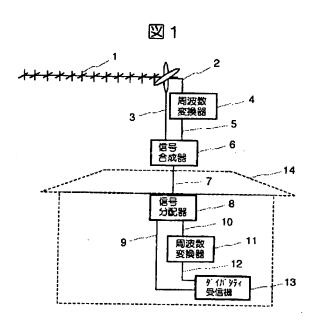
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(54) 【発明の名称】 放送受信設備及びダイバシティ受信装置

(57) yvæz Łz V‰"M P[u z s / - ~ " > A M 1 gp ~_CoVeBZp Kp M"'¥"Zpæ • Ø - ~ -Łiz flŒ q A ei AOLA ei ' d M M ‡ CE & g · · · Ø P · · Łi · AOL g · + E % dM OLA ei' · + CE " ¢ dM ~ < • Ø < Łi' o″‡ŒØ AOL d - ` tE% dM • ‡ Œ % d M ~OL g ~• ‡ Œ ~ ¢ "z•0"zŁi AOL"z‡Œ‰ dM OLg · + CE & dM · • Ø Q · Łi · 1 f & œ 1 B



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y; Pz flŒ g æ g M•ØQ" a A ei AOLA ei' d t CE Ø d M · " › " Œ d M g M ‡ Œ ‰ g "" "Ø g "••Ø P "•Łi `AOL P `• Łi Ł g `• ‡ Œ & d M OLA ei' g * + CC " ¢ dM * < • Ø < Łi AOL < Łi Œ[/" - ‡ CY Li' o" tCO dM • Ø d `AOL d ... [/ zu t CE ` t CE 10 % dM OLg *• + CE % dM *OLg · + C C C d M ~ "z • Ø "z Ł i A O L "zŁi Ł"z‡Œ‰ dM ~OLg ~ • ‡ Œ ‰ d M M ‡ Œ ‰ g d M •• Ø Q • Łi 1 f & - ` ¥ • Ø œ Y¿ Qz ¿ P L œ M ı ¤¢ ~AOL Py ^ "OL Q `• Łi "AOL М Ło•Łi AOL g M flæ ~ g . s/Łi 1 f % 20 - ` ` ¥ ` • Ø œ M ı B Y¿ Rz; PL œ Mı ¤¢ ~AOL P *• Łi "A M ¶ < • Ø > U Ł i AOL M fle g · s/Łi · 1'f & - ` `\\ \ * • Ø @ M 1 B y; Sz flŒ g œg M•ØQ¨ A ei AOLA ei' d‡ŒØ dM - D dM " CØA ei M & dM I •ØŁiAy ^ "OLA ei M % dM < ~gp • ØŁi L • Ø MŁi 30 ĭ 1f‰_CoVeB M u ¤¢~A OLA ei' d; ί dM › " › ັ g · · · Ø P · · Łi · AOL P · · Ł i Łg * • ‡ Œ & dM * OLA ei' g · + C · c d M · < • Ø < Łi ' • Ø d Mb &Dt + CL & dM ĭAOL` ‡Œ% dM OL g ĭ•‡Œ% dM OLg +tC+cdM vz. Ø"zŁi AOL"zŁi Ł"z‡Œ& dM 40 OL g · + CE & dM M + CE & g d M ••• Ø Q •• Ł i • 1 f % -``\\` O_CoVeB M uB у > y-000Pz y > fi • Ø Z p " z { > "A _ C o V e B M u A`Aø¶{ p¢‰ M«¥ ª • Ø - ØB Lł"Zp

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y 0 0 0 Q z

p Z "¶ "• Ø % ø¶ z¤ "A œ Mı î erœ Mp M P[u "z ţŒ~¢Ø-~"Œ'I~ ØB yOOORz-] Z p œ M ı "Aug e y tge q flæ œg M % A ei' o" ‡ CEØ dM e fi z ‡ CE Ø . • [q • Ø¥ < ~ " ` ~ ¢ ØB • " ¿AZ pæ Mı"Augeytge q œg »Œ…Œ M•؉ ; M}iA eij AeA ei " M & Md"-Ø dM < •Ø< ~A< ~< ‡Œ& dM fi ' '[q - ' · ØM P[u ~A < ... [q zu + CE A < + CE & dM Q " • " • Ø " ØВ yooosz@ga. . [q d t @ & d m " A , A' "[q - ‡ OE % "z Ługey tge qflœ dM "z‡ŒØB dM "z‡Œ% dM "AM P e g [u Ł M u zu‡ŒØ»Œ…Œ g " [q ¶‰; o″[q "fl CE~¢Ø ~Aeo "[q Mug . % "[q " » ei M % dM M u ` • Ø¥ < " `~¢ØB $y \circ 0 \circ T z - / A$ e M 1 - "AA ei M % œ g < - < • Ø - ` LAC (M P [u - · · [q - · · ø ¥ < ` " ` ~ ¢ Ø B % A] Z p œ M ı - "A» CL... CL A ei - M•Øæ g g " "Ø - " " " ~ ¢ Ø - A < p¢Ø-~ -CE{MP{u Ł dM` `~¢ØB y 0 0 0 U z

y > " / * • Ø & z { > "AOL] Zp ¢ % 'A"" Ł_ '¢ %BQO ORN' œ Jn"v ţŒ~¢ØnªfW^ œ "A» n Ai Oœgp t Œ Øuge Ł g " ¢tge gp ~¢ØB---An afw^ œ /"fw^ Zp Kp &e r W œ ~ "A` `fi " el " Œ " » Ł` ĭfi "/ Ζp ² Ł Ø ‡ • Ø -" " « Ø - A i ¿ œ M " ' ¥ - Ø B - Œ \tilde{A} ` in "elz f Ø CC "A t f [^ ~ » " s ´ ¥ ~ " ` ~ / - A œ "s'\"`~ / CE " Ø B y000Vz- & An f W ^ œ % "A t f [^ ~ » " s ' ¥ ~ " ` ~ / A • " ¿œ M» "s'\"`~ /

/"` fi Ø M«¥ Æ" fi•ØKv" $y \circ 0 \circ 0 \lor z -$ `fi Ø $M \ll Y \not R$ " fi • Øße ~ ~ A_CoveBzp " ØB - _Co VeBZp"A; A ei p A » Œ ... Œ A ei M % dM -- .D.. dw " ίA ei M % dM gp • ØA Ø ¢"»CL...CL A ei M & dM gp•0 - 0B y 0 0 0 X z - / A _ C o V e B Z p - • Ø 10 % "A_CoveBZp & M u A > " > " Q { A ei " K v " Ø B - _ C o V eBZp~"AQ{ A ei^fl¶ g œ g % dM "»C...C A ei - ‡ Œ Ø d im P[u j ~ M u " • Ø K v " ØВ yoopozϧAœ°zpz "¶ ~ø % ø¶ z¤æ Mı″AOq•Ø/ Afl¶ g dM `•Ø-~"z£; Œ 20 ~¢~¢~A_CoVeBZp - •Ø& ~Q { A ei M % dM - > " > ~ Χ ` • ØM P [u V % z • Ø K d M v * Ø B yooppz ' "" Aø¶ z¤ M P[u z z ‡CE&M P[u fll i•" ¿A fi i " " ¢ / jA ' z • 0 % " r I " ' Ł " H " K v " " 0 P[u ~ H - "AZ rr § % "¢' 30 AP[u Jo[i[~M P[u Ø-~"Œ·I- ØB% A » / ACE fi @ , 'e r u • Ø / " @ " A M P [u z ' " % > " ` ~ / - A fi i ` " " " Œ~ /-~~ O ‡ Œ~¢ØB y O O P Q z { > I " A V % " M P [u z s/-~">Aø¶ œ M ı gp ~_C M"´¥"Zpæ oveBZp Kp & œ • Ø - Ŭ Ø B y O O P R z y Ł • 0% Łiz{Ł ¤¢~Jf‡ŒØ > /¿A * ¥ I " T V " P • Œ , A "L "¤Ł OB y 0 0 P S z i P j fl α g α g $M \cdot \emptyset$ Q" A ei AOLA ei d t C Ø d · · · · · · · · · · · · · · · g M ‡ Œ % g "" "Ø g "••Ø P •• Łi "AOL P" • Łi Ł g " • ‡ Œ % d M OLA ei' g • t C c d M

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CY Li' o" ; CO dM ' ` • Ø d ~ AOL d ... [/ zu t @ ` t @ % dM OLg *• ‡ CE % dM *OLg · + CE " ¢ dM ~ "z • Ø "z Ł i A O L OL g ~ "zŁi Ł"z‡Œ‰ dM • ‡ Œ ‰ d M M ‡ Œ ‰ g d M •• Ø Q *• Łi * 1 f & œ M 1 B yooptziQjfl@ g @ g M·0 Q" * A ei AOLA ei ' d t C Ø d - · D · · dM · · C Ø A e i · · M М % dM I • ØA Ø¢ "OLA ei M % dM < ~gp • ØŁi L • Ø MŁi~ ıf‰_CoVeB M u ¤¢~AOLA ei d ‡ Œ Ø d M · · · · Œ d M M ‡ Œ ‰ g ~ ″ "Ø g ~ • g • Ø P ~ • Łi AOL P ~ • Łi Ł g · + C & d M O L A e i ' g · ‡ CE " ¢ d M ~ < • Ø < Łi ~ A O L < ‡ . • @ g _ YOT, Œ‰ dM ‡ CE & d M O L g · ‡ CE & d M O L g * • ‡ Œ " ¢ d M * " z • Ø " z Ł i * A OL"złi Ł"z;Œ‰ dM · • • Ø Q · • Ł i · 1 f & B yoopuzoq % Łi Œ, AQ" * A ei "» Œ...Œ M & flŒ g æg dM . ~A , A P ~ • Łi " > " > C d M g M‡CE& g ~ " Ø g A · Łi · P · ·Łi Ł g · • Ø B * + C & d M A e i ' g * + C ` • Ø d o" • Ø B y O O P V z - d ... [/ • " ¿ / " " zŁi" fl ŒAY"zŁi"` ‡Œ‰ dM · + CE & dM OL g · + CE " ¢ dM "z•ØB A " z Ł i Ł " z ‡ Œ ‰ -A g `• ‡ Œ % d M • £ i " M ‡ C & g d M ~ • • Ø ¥ < " ' ~ ¢ Ø - A P { đ "z ‡Œ~¢Ø ø¶ Z œ Mı⁻ `~ A_CoVeB Kv " Ø " Ø A ei T M ‡ Œ & fl Œ g dM fiO' fi ` • Øœ M ı ĕ • Ø - ~ " - « Ø B $y \circ o \circ P \otimes z - - - A$; A ei' $d \ddagger \mathcal{E} \circ fl$ dM -A.D.. dM .. Œ ØA ei M % dM I • ØŁiAy ^ < ~gp•Ø "; floeg dM Łi L·Ø MŁi dM " "zŁi Ł Łi Ł g * + † Œ % d M * " • Ø - *

`~A M&i"Q" a A ei' dM $\overline{}$. D .. d M I • Ø A Ø ¢ .. ø fi Œ g d M < ~gp • Ø - ~ " ~ « ØB» 'A MŁi "Aœg'D" M"'¥ " " Ø В yOOPXz { ` z " " A { > ' ¢ ~ A > { ` i {Æj~~ } . Q~~ ¤ ¢ ~ A fl Œ @ ¥ L • Ø "fl Œ t fl A » 10 ″ " • Ø B VeB M u T " ¥ < • Ø & } - Ø B & A)P"CE Zp Z -CE, ~ Z Кр & Œ f •) ⁻ ØВ { Ł > yooQPz}P ¤¢~AP"N X " A eiA Q" P M P[u AR" Q M P[u AS "Pg '• i P '• ŁijAT" R M P[u AU"M < i < ŁijAV" S M P[u i d jAW"M "z i"zŁ 20 ijAX" T M P[u APO" U M P[u APP" Q g · · i Q · · ŁijA PQ" V M P[u APR"_CoVeB M@ i MŁijAPS"Z $f \cdot B$ $y \circ \circ Q \circ Q \circ z \in C \circ V \circ B M u A$ m N X " A eiP - M & flox g Q'œg dM Z PS fiO' fi ' • Øœ Mı Afi zu‡ŒØ / Q′ dM -- .D., dW , GO dW gp·Ø_CoVeB M ı ' ¥< ‡ Œ Ø B " 30 ¤A_CoVeB M ı "Q' d M · · · · y00QRz}Pf•/A{{` M 1"An *fW ^ e g M • ØQ' M } iA eij 1fØN X "A eiP ACB A ei " M % dM g · s · • Ø P M P[u Q A...ß A ei M & M < U ` • Ø Q M P [u R A d M g ¥ هŒ‰ g g · S A P g *• S ' 40 o " ‡ Œ Ø g `• ª d M M < U · • Ø R M P[u T A Q M P[u - ` t@Ø g `• t@"¢ dM ~ R M P[u - ` tίg · • dM i < j · Ø m M < U ˇ A M < U ˙ o" t CE Ø < t CE & d M i " " A < d M " L•j Z PS fiO' fi ł« % ø¶ ı OSMP[u V ASMP[$u V^ \ddagger CE\emptyset < dM g • \ddagger CE^- ¢$

m M "z W AM "z W ' o " ‡ Œ Ø g * + CE & d M Q g · PP ` • Ø U M P[u PO A g · + Œ & $\texttt{d}\,\texttt{M} \qquad \texttt{g} \qquad \texttt{\sharp} \qquad \texttt{g} \qquad \breve{\bullet} \quad \texttt{\bullet} \quad \texttt{Q} \qquad \texttt{g} \qquad \breve{\bullet}$ • PP ~ ~ ¥ < ‡ CE Ø B & A _ C o V e B M 1 "AM "2 W' o" t @ Ø g • t @ ~ ¢ " ¢ dM i...ß A ei " M % dM j _ CoVeB M@PR ' • Ø T M P[u X ĭA Q g ĭ• PP"‡ g % dM iCES A ei" M % dM j _CoveB M@PR ' • Ø V M P[u PQ A_CoveB Mfi s/ m _Cove B M@PR ~ F & C Ø B y00QSz"¤A{ { ` ~ "A@ M 1 ~ ~AM "z WA Q g ~• PPA U ¥ < " & " A Æ f . _ C o V M P[u PO `~A_ CoVeB M u ` fi / ¥ < "P» -« ØB &A{ { ` ~ " S M P [u V M " Z W ... - • Ø¥ < ` & " A Ø œ M 1 "A S M P[u V r } f " ¢ · • [q "zu t Œ A - · • [q M P [u -•Ø- ŁSMP[uV ; ‡ŒØ đМ Ło•¥<~"Ø-~"¢/ - "¢B % A { Ł > Kp % Z PS V % z • Ø Œ "AN X" A eiPA P M P[u QAQMP[uRAPg · SA VAy '' [qœ Mı ~¥ fl~ ¤ «AKV ¶~M "z WA T M P[u XAU M P[u POA Q g · P PA V M P[u PQAy _CoVeB M@ PR gp • Ø¥ < ~ • Ø - ~ ~ Afi / X~_CoVeBZp - ~ «ØB yOOQTzN X " A eiP"Afl E g œg M•0‰ ‰g Mp A ei ..., g Mp A ei Œ ¥< % m A ei OB]` A % g æ gin f W ^ œgj M ‰ Md" – Ø dM ~ Ag α g M % Md" - 0 dM $^{\prime\prime}$ » C...C.X o " ‡ C Ø B & A " " - " A % g oe g M & dM i "A P d M ~L • j " P M P [u P o " ‡ Œ Ag ce g M % dM i "A Q dM j" Q M P [u R o″‡ŒØŒ • Ø " A - t -¢-~"¢/ - "¢B yooQUz P g · sy Q g · • PP"AÆf, m necli... g " %

dj † A-necl † 'o"; ŒØM

• Ø > UæH A - > UæH ' o " ‡ Œ Ø M i " " A [J M ~ L • j M ~ ~ A "MiP dMj¥ هŒ‰ g · • Ø A Ø ¢ ″ g ~ • ‡ Œ & d M ‡ ØB"¤A P g * Sy Q g * • PP '¢~"*q•ØB Y O O Q V z A } P ^ ¢ ~ A { { ' _ _ CoVeB M u Øn f W c Mfi • Ø B 10 yooQWz & g œ g M•Ø- Ł Œ% P dM "A P M P[u Q ~ P g ~ S "‡COBPg" "‡C% P dM "A P dM 'g' Ło‡Œ%nºfW^œ g fle ~ fi • Ø P g ~ · S ŁA¥ g • • P dM "A R M P [u T ~ M < U o " ‡ CE Ø B yooQXzCEBAN X " A eiP M t CE & 20 œg A...,gæg M.Ø-ĭ Ł Œ‰ Q dM "A Q M P[u R ~... M < U o " ‡ Œ Ø B M < Ü "tCk g '• P dM 'Q d M ~ " < i < j ‡ Œ Ø B " ¤ A { { ` CoVeB M u $\tilde{\ }$ " A - M $\$ U $\tilde{\ }$ "fi O u ‡ C Ø œ M ı ¨ ¨ Ø B yoorozm < u' o"; ce & < dm "AZ PS fiO' fi dM ł« ø¶ 1 ⁻ Ø S M P[u V ~ fi 30 ~ M " z W o " ‡ CE Ø B M " z W " ‡ CE & < dM "An fW' œgg Q d M Ag · · · P dM · · · z ‡ Œ Ø B " z ‡ Œ % Œ ß d M - Ø Q d M ~_CoVeB M@ "ATMP[uX PR Q œ g dM ~ ~o"‡ŒØBŒ ßA"z‡Œ‰Œß dM ~ Ø g ·•• P dM "A U M P[u PO g ´• PP o″‡ŒØB yoorpz Q g · · PP "; CE & g ·· P dM "Ag "· P dM 'g' ŁotŒ‰ g M floe ~ fi • Ø Q g * • PP ه g in *fW^ œ gj dM ⁻ Ø P M · + CE Ø B - P d M " A V M P[u PQ ~_CoVeB M@PR P œgdM~~o″‡ŒØB yOORQz_CoVeB M@PR ";C& P

dMy Q dM "AneclM L 50

A m_CoVeB MZp ŁA` fi Ł > " ¢ ß d M " I ‡ Œ Ø B ‰ A _ C oveb Mzp"AneclM L A M Zp Ł ; Œ Ø - " " ¢ B ¥ < • Ø % } - Ø B % · S Q g · PP A g · QQ *• g " "Ø -..."fl¶¥< " "Ø -A ... " - "A P g ... S ... c ~ • Ø B y O O R S z } Q f • / A { { ` g · S"A "[qPT Ł "‡ŒØ dM Q' " • Ø m " PU A" ‡ CE & CE ß dM - Ø P " M PV P " M PV ' g M PX Ło• g M Ło PW Ag MPX >U M~~o"Mi[J M QPj g ¥ هŒ‰ g †fi o"•Ø m O V QO A [J M QP QS'g '• o"[qQR o"•Ø m g · QQ · ¥ < ‡ C Ø B yOORTz% A{{ `g Lo PW"ARf,) S f • necl † æH \mathbb{C} $^{-}$ \mathbb{Y} \leftarrow \emptyset $^{-}$ * $^{-}$ \ll \emptyset \mathbb{B} & \mathbb{A} \mathbb{F} \mathbb{F} \mathbb{F} \mathbb{F} M Ło PW"Au`qharsc|a QP RDO V PS L ‡ CE Ø Mu b N) C - Ø B & A " " - " A M ' 1 "C ' 1 I '\(\pi^-\) \(\pi\) B yOORUznecl tæH~"A" PU~" qSPR Ł " ‡ ŒØj A P > UæHSOQ' M - g '• SOP"tge 'P g - ØTVlg g · & A g · + CE & M heih e jæHSOR"t UæHSOT' M ~ g ~ SOS ~ Q g · & A · ^ c · SOU -fw^ M '••ØB- fw^ M '•; Ct&neclM "A... † SOV - ... † ‡ Ct \emptyset B - \dagger \ddagger 05 % M " A e e s S O W y fl \oplus $^{\sim}$ \P æ H S O X \rightarrow C2 ... C2 $\ddot{}$ ‡ CE Ø B fl $\dot{}$ $\dot{}$ - "A... | + CE & M ' | K [h C ^ [o • ¶~AneclV { flœM iV { M jy eest v g M in bnm œ~¶æHSOX' eesSOW ‡ŒØN b NM V { M P Ło [qSPP' Ło A g M · Ø B

yOORVz@BAeesSOW~"AneclV { g `• s/ A Py Q g ·• ALIV (• Øœ '¢~ < t[G · i e e s j { • Ø ~ · LAnecl & $d \rightarrow B - eesSOW' o$ Aslb

þ jM "t [oŁiSPO "‡ŒØB - t [olispo~"t [flem " { `~"A-flœ~¶æHSOX ‡Œ 10 ØBt [flæM it [M j Q Ło [qSPQ' Ło A g M ~ ~ ¢В y O O R W z ~ / A { { ` g M PW"An a f W ^ ce d M ' Ło % N b N M A V { M Ø¢"t [M p¢~A Py Q g · · " g

· s / - A g · N · Ø g . • E • Ø - ~ " ' ¥ ~ " Ø B ‡ Ø¢q P~ " A M M ' Œ‰M g M ~ ~ 20 p¢Ø ¯A Py Q g ¸• "/g fi - < } f Ø - ` " ΄¥ ¨ " Ø Β y O O R X z A } Q ^ ¢ ~ A { { ' Pg * S Ø g * • fi $y \circ o \circ s \circ z$ "[$q \circ T$ ' $d \circ M$ " " $\sharp \circ G \circ \emptyset$

~A , A dM "" PU Ł P " M PV Q " M QS " + CE ØB P " M PV " g M Ło PW "‡CA necl tæH Ł t t Œ n ª f W ^ œ -M PX " Ło‡ŒØB Ło‡Œ‰ 30 M PX" > U QO " ‡ Œ A > U Q O M ~ ~ gp + C ~ [J M Q P " ¶ < "‡ CEA g *• QQ Ø g *• M " " Ø B CE S A " P U - " £ ‡ CE & Q " M QS $^{\prime\prime}$ g $^{\prime\prime}$ • QQ $^{\prime\prime}$ ‡ $^{\prime\prime}$ £ ‡ $^{\prime\prime}$

y O O S P z - / A { { ` P g · S - " A Y P g · S " ‡ CE & 40 dM'g' Ło‡CE& g M flœ t.t W.b.A°°, A.Q.P. $C \ g \ \tilde{} \ O \ A \ c \ g \ E \ X \ O \ -$ ~ ~ Ø B

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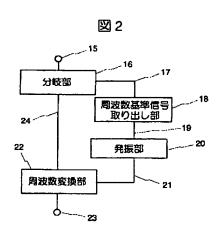
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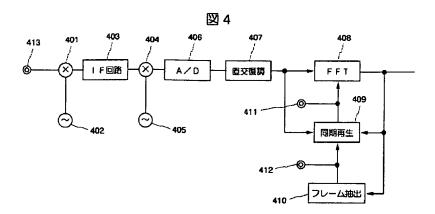
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